

ON THE RATIO OF THE MAIN AGRICULTURAL SECTORS
IN THE URBAN ECONOMY OF THE PRINCIPALITY OF
MOLDAVIA (THE END OF THE 16TH CENTURY – BEGINNING
OF THE 18TH CENTURY)*

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ABSTRACT. The article considers the ratio of the leading agricultural sectors in the economic structure of Moldavian cities in the period from the end of the 16th century to the beginning of the 18th century. The study attempts to systematise the available historical material (various sources of that era) based on the mathematical method and mathematical modelling tools. The results of the study confirm the well-established facts that agricultural and trade and handicraft activities were basic in the urban economic infrastructure and were closely interconnected. The dominance of the agrarian factor in urban life and the semi-agrarian nature of the towns of the Principality of Moldavia contributed to significant functional changes in the evolution of the economic infrastructure of towns and cities, the formation of the urban market, trade and market relations, craft formations, and so on for the following centuries.

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Keywords: The Principality of Moldavia, 16th–18th century, agricultural sectors, urban economy, mathematical approach and historical sources

Balcanica Posnaniensia. Acta et studia, XXX, Poznań 2023, Wydawnictwo Wydziału Historii UAM, pp. 91–107, ISBN 978-83-67284-33-2, ISSN 0239-4278. English text with the summary in English.

<https://doi.org/10.14746/bp.2023.30.6>

Written sources of local and foreign origin testify that during the period under study, there were more than 30 towns, fortresses and trade and craft centres in the Principality of Moldavia, which were designated by various Slavic and Latin terms, depending on their functional affiliation.

* This article has been written in connection with the research project *Museum heritage and historical memory: research, interpretation, presentation* (Code: 20.80009.0807.43), financed by the State Program (2020–2023).

Fortified points and fortresses were designated in the sources as “towns” (Bacău, Bârlad, Adjud, Vaslui, Tecuci, Belgorod, Roman, Neamț, Suceava, Țețini, Khmelev, Khotyn, Hârlău, Krasny Torg, Chernivtsi, Old Orhei, Kiliya, Soroca) and “castrum” (Belgorod, Suceava, Țețini, Khotyn). The city centres themselves are referred to as “oppidum” (Belgorod, Siret, Adjud, Vaslui), “forum” (Roman), “civitas” (Siret, Baia, Vaslui), “urbs” (Kiliya), “mesto” (place) (Neamț, Siret, Khotyn, Bârlad, Vaslui, Tecuci, Chernivtsi, Shcherbaka), “torg” (township) (Iași, Roman, Piatra, Suceava, Siret, Baia, Bacău, Bârlad, Vaslui, Krasny Torg, Hârlău, Sărata, Chernivtsi and Dorohoy).¹

The status of Moldavian towns was determined by: (1) political significance (large administrative centres, capital cities); (2) economic and functional role (trade and fair centres, port cities); and (3) geographical location. It should also be noted that during this period of time there were major, radical changes in the political situation in Moldavia. Until 1538, it was an independent state, and then it was conquered by the largest foreign empire of the Middle Ages, the Ottoman Empire. And although Moldavia did not become a province of the Ottoman Porte, like Bulgaria and Serbia, tributary relations nevertheless entailed a certain breakdown of established state and social traditions, with all the ensuing consequences.²

The specific and distinctive feature of the Moldavian towns was, firstly, that they originated from rural establishments. The exceptions were fortified cities and port cities. Secondly, the towns and cities were never privately owned, they were always an integral part of the princely land domain, subject to centralised authority and had a semi-agrarian character.

Unlike villages, Moldavian towns had a local administration, the right to self-government, the right to choose the head of the city, and their own seal, which, in fact, ensured the urban status of the settlement. The city administration in the Moldavian cities consisted of a small council of *pârgars* headed by a *șoltuz* or *voit*. It is known that in Poland the head of a town or city was also a *wójt* (from the German Vogt). It is interesting that the word “pârgar” comes from German (“burger”, city dweller). The word “șoltuz” has two versions of origin: from the Polish “szoltys” and the German “Schultheiss”. The number of *pârgars* was always 12, as in city councils in

¹ *Istoriya narodnogo hozjajstva Moldavskoj SSR* [History of the national economy of the Moldavian SSR], vol. 1, Chisinau 1976, p. 77, 109 [INH].

² L. Zabolotnaia, *Ethno-social characteristics of the Catholic population in the urban environment of Moldova in the 16th–17th centuries* [in:] *Sources of local history: Methods of research, problems of interpretation and popularization. National Academy of Sciences of Ukraine*, vol. 19, Kiev 2009, p. 130–146.

Transylvania, Hungary, Flanders, and Germany.³ The city administration was also elected for only one year.⁴

The issue of the agrarian nature of the Moldavian urban economy received coverage in the historical literature to a certain extent. The subject of this study is the role of the agricultural sector in the development of the urban economy, the importance of agricultural industries and the correlation between them in different periods of time, as well as the importance of the agricultural factor in the formation and development of the urban market.

The main sources for this study were all types of written sources: princely deeds, letters patents and charters, acts of sale, duty decrees, information from Moldavian, Romanian and foreign chroniclers, notes of foreign missionaries and travellers who visited the Principality of Moldavia, works by Dimitrie Cantemir.⁵

Initially, we would like to note that our study is not traditional in nature, since we do not have all the sources of the era in full, which would allow us to exhaustively investigate this issue. In this study, we resorted to a non-standard methodology and made an attempt to systematise the available historical material based on the principle of mathematical calculation and analytical generalisation. The use of mathematical methods in historical research makes it possible to study some of the key problems of Moldavian history by illustrating the analysis of the available sources with specific examples. The use of mathematical statistics methods in historical research, as well as that of mathematical modelling tools, also makes it possible to reconstruct historical events and processes more reasonably.⁶

In particular, we studied more than 2,000 documents of the era, in 300 of which we found information on the agricultural sectors in Moldavian towns and the agricultural activities of the townspeople. In order to make the reliability of the presented material more conclusive, we compiled tables in which the information about towns was systematised. Information collected from various groups of sources, which contained data about the agricultural industries and crafts in towns and cities, was entered into tables (with + and – signs, respectively), and then, based on mathematical calcu-

³ In the documents of the 14th–15th centuries in addition to the “council of pângars”, the city council “ryadtsy tovgovskiy” is mentioned. The term “ryadtsy” is of Polish origin. Such a council corresponded to the wider Lviv City Council. Basically, Polish cities received two systems of German law: Magdeburg and Lübeck. German and Polish colonists introduced German law into the municipal and craft administration of Moldavia; V. Costachel, P.P. Panitescu, A. Cazacu, *Viața feudală în Țara Românească și Moldova (sec. XIV–XVII)*, București 1957.

⁴ C. Giurescu, *Târguri sau orașe și cetăți moldovene din secolul al X-lea până în mijlocul secolului al XVI-lea* [Moldavian fairs or cities and fortresses from the 10th century to the middle of the 16th century], 1997, p. 82; L. Zabolotnaia, *Correlations between the Catholic and Orthodox population in the urban environment of Moldavia (16th–17th centuries), based on the accounts of Catholic missionaries*, “Historia Urbana” 2003, vol. 11, no. 1–2, p. 73–79.

⁵ D. Cantemir, *Descrierea Moldovei* [Description of Moldavia], Chișinău 1994, p. 153.

⁶ A.E. Negin, A.A. Mironos, *Matematicheskie metody v istoricheskikh issledovaniyah* [Mathematical methods in historical research], Nizhny Novgorod 2012, p. 3.

lations, statistical schemes and diagrams were compiled to visually highlight the problem under study.

It also necessary to take into account the fact that the epoch under study is quite long and characterised by different levels of economic development, therefore, in order to concretise and detail the material, we propose a conditional periodisation of the epoch:

- I. late 16th century – early 17th century;
- II. 1620s–1670s;
- III. late 17th century – early 18th century (until 1711).

Conventionally, each period is about 50 years. Such a research approach allows us, firstly, to clearly present a picture of the economic situation of the towns in the country in a given period of time. Secondly, it reflects the evolution of the agrarian occupations of the townspeople over such a long period. Thirdly, the accumulated information will make it possible to show the leading agrarian specialisation of a particular town or city and determine its proportion in the occupations of citizens. Fourthly, we will be able to identify the agricultural sectors that dominate the economic infrastructure of towns and cities and highlight their role in the formation of commodity-market relations in the domestic and foreign markets.

The variety of types of urban agricultural economy depends on the dominance of one or another agricultural sector, which determines the internal market specialisation. The development of a particular agricultural sector plays an important role in the formation of the urban market and determines the degree of maturity of the socio-economic structures in general.

In this context, it should be noted that information about animal husbandry, agriculture and viticulture is much more common in the sources, since these were the main and most developed agricultural occupations of the townspeople. However, this does not mean that the activities of urban residents were limited only to these industries. Information about other types of agricultural production is mentioned less in the sources of the era, and therefore there is a certain statistical discrepancy (decollage) in the diagrams and tables. A small amount of information is not a fundamental indicator in the study, since the sources of the era under study are rather limited, fragmentary and scarce, therefore, statistical indicators in this particular case do not objectively reflect the situation. The absence of sources and information at present does not mean that the facts did not exist. Indirect information confirms many facts given by us on the basis of a mathematical calculation of references from various sources.

One of the main objectives of the study is to show the main agrarian and economic activities of the townspeople, as well as highlight the role and influence of agricultural industries on the socio-economic infrastructure of cities.

The diagrams were compiled according to the principle of the number of references in sources related to each time interval. The summation of these data makes it pos-

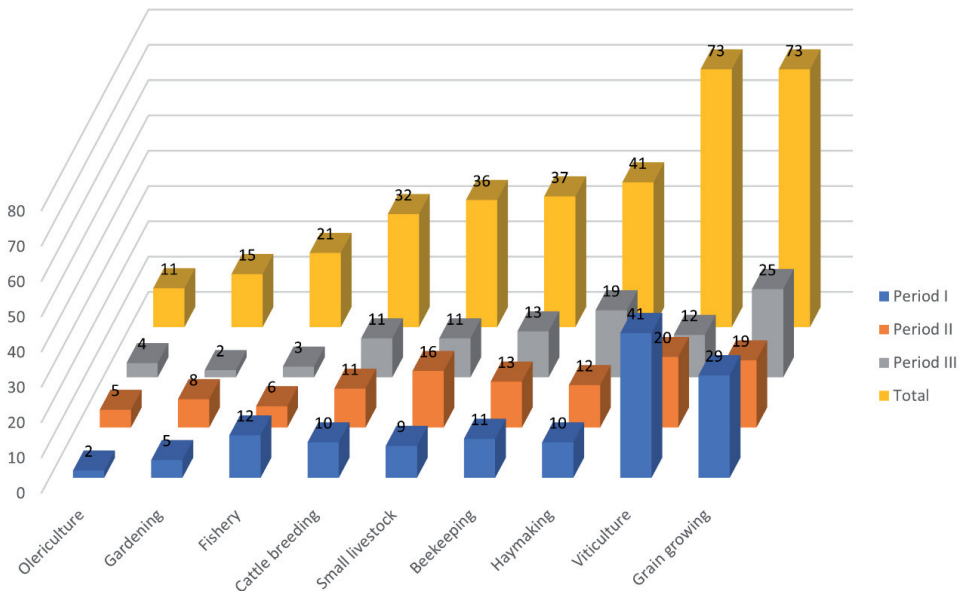
sible to see which industries have developed in the urban economy and how each of the industries was represented in relation to others, as well as the cycles of progress and regression of various agrarian sectoral structures in the urban household.

Diagram 1, respectively, based on the number of pieces of evidence from sources, show that in the first period (late 16th century – early 17th century), the urban residents of the Principality of Moldavia were engaged in a variety of agricultural activities: animal husbandry, grain growing, viticulture, gardening, beekeeping, haymaking.

The most developed agricultural sectors were (Diagram 1):

1. viticulture: 41;
2. grain production: 23;
3. animal husbandry: 19.

Diagram 1. Agricultural sectors in the urban economy of the Principality of Moldavia. Number of source evidences (16th–18th centuries)



Period I: The end of the 16th century – the 1st quarter of the 17th century

Period II: The 2nd and 3rd quarters of the 17th century

Period III: The last quarter of the 17th century – early 18th century

In percentage terms, these indicators are reflected in Diagram 2A and 2B, respectively: viticulture — 32% in 2A and 29% in 2B; grain production — 22% in 2A and 20% in 2B; animal husbandry — 15% in 2A and 14.4% in 2B.

Diagram 2A. Percentage share of agricultural sectors in the urban economy of the Principality of Moldavia, excluding fortress towns (16th–18th centuries)

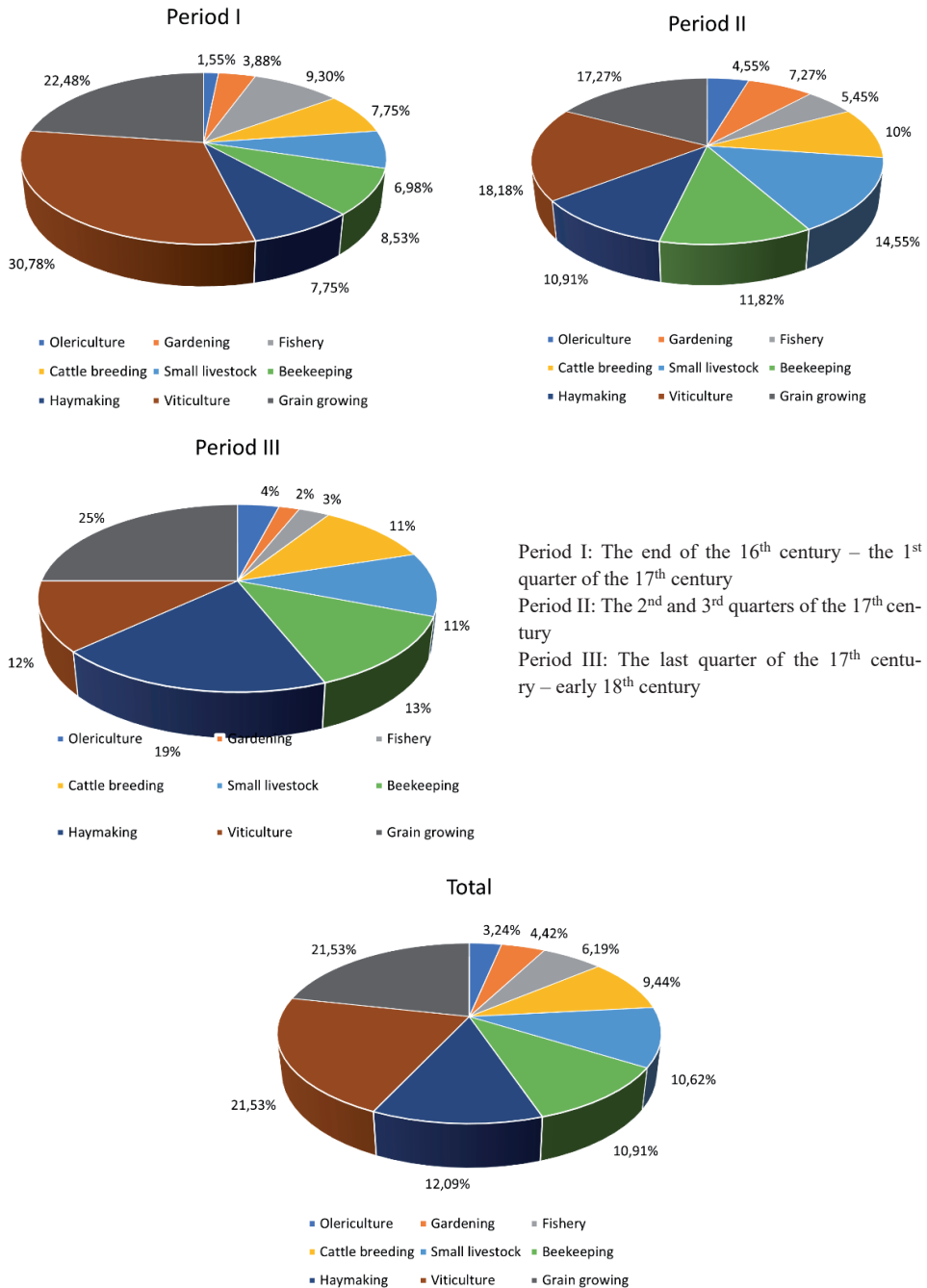
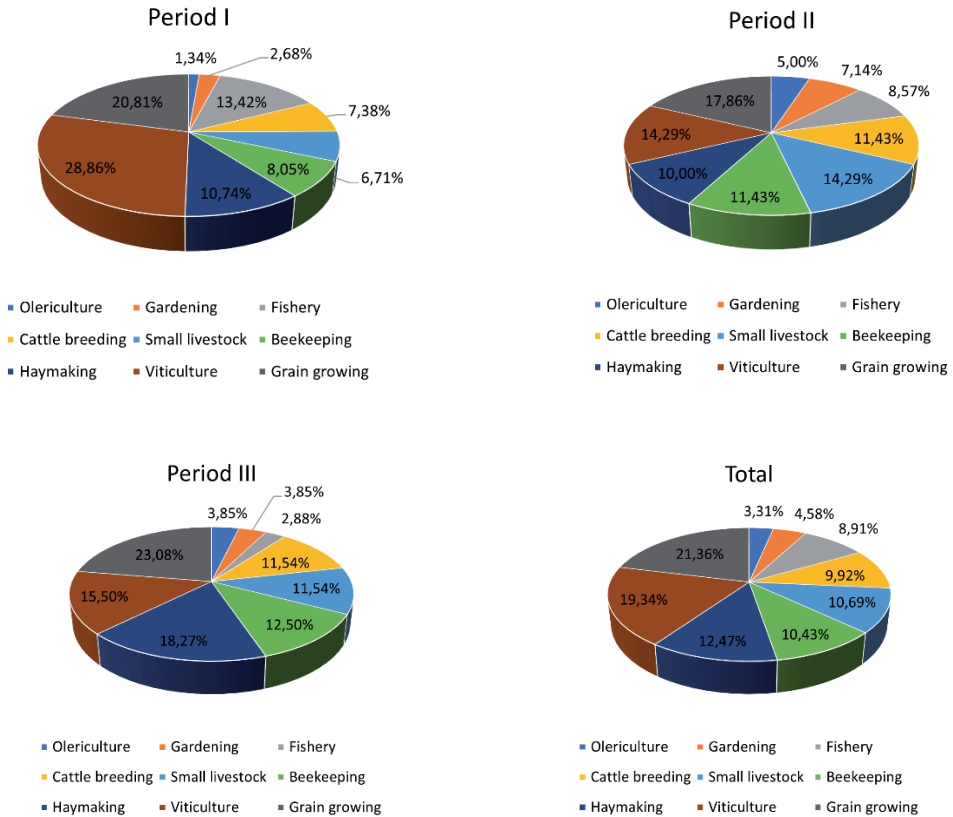


Diagram 2B. Percentage share of agricultural sectors in the urban economy of the Principality of Moldavia, including fortress towns (16th–18th centuries)



Period I: The end of the 16th century – the 1st quarter of the 17th century

Period II: The 2nd and 3rd quarters of the 17th century

Period III: The last quarter of the 17th century – early 18th century

Despite the fact that the information is provided by a simple mathematical calculation and, on the one hand, is conditional, it is relatively close to the real situation. As can be seen from the above, the most developed industries in the period under study were viticulture, grain growing and animal husbandry. Designating viticulture as an independent industry allowed us to highlight its importance. The cultivation of vines, of special varieties of grapes and winemaking go deep into the history of the Principality of Moldavia and are the traditional occupation of the Moldavians (until now), so the strong development of this industry is beyond doubt. Favourable climatic conditions — air humidity, sunshine duration, soil quality, landforms — contributed to the

development of viticulture. The fertile land and the warm temperate climate contributed to the maximum accumulation of sugar in the grapes and the decrease in the acidity of the grape juice, which gave the wines a unique richness, maturity and flavour.

Grain farming, the cultivation of cereals and legumes, in turn, was also a particularly important branch of crop production in the agrarian economic sector of Moldavian cities. Agriculture, arable farming, and haymaking also had a strategically important food and fodder value for the entire urban population and was especially significant, both in the domestic and foreign markets.

The next category of the main agricultural occupations of the townspeople was animal husbandry. It provided them with livestock products, and in addition, at that time arable farming was based solely on the use of the draft power of domestic animals, so cattle breeding remained one of the main occupations in medieval community.

The fact that during this period, at the end of the 16th century and the beginning of the 17th century, these particular agricultural sectors were developed in the urban environment, is evidenced by foreigners who noted that “Moldavia is a very beautiful country [...] with a healthy climate, fertile soil, very rich in grain, vineyards, cattle, a special breed of horses.”⁷

In particular, Antonio Maria Graziani (1637–1611), in his work “Description of Moldavia” (“Descrierea Moldovei”)⁸ of 1564, describes the special properties of the land, the richness of the grain harvest and vineyards, paying special attention to the annual specialised livestock fairs, which were held near major cities and attracted merchants from many European countries:

The fertility of the earth is so great [...] and the people sow so much grain that they always have enough for all their needs for a year [...] They produce enough wine too, never feel its absence [...] Many oxen are exported from Moldavia, the meat of which feeds not only the neighbouring peoples of Hungary and Russia, but also Poland, Germany and even Italy, especially the city of Venice [...] Every year here, in Moldavia, 7 livestock fairs are held, on the spacious plains, where a huge number of merchants gather. Usually, thousands of heads of cattle are driven to these fairs, and after 3 days there is an agreement with merchants about prices, the price of one head of cattle is set in order to calculate the wholesale (purchase) price. It is rare when the price is more than 3 gold coins (*galbens*), and within a few hours this whole herd of bulls is sold and taken away to different regions. The boyars who raise cattle have large incomes from this, and the ruler himself has great benefits from these fairs [...] *Vătafs* (managers) annually bring to the prince’s treasury up to 400,000 gold coins from the income of the whole country; of which 60,000 are paid to the Turkish Sultan as tribute.⁹

Describing the second stage, which covers the 1620s–1670s, we would like to note a larger number of sources and evidence, which makes it possible to more ful-

⁷ M. Muriano, *Raport din Moldova* (1502) [Report from Moldova (1502)] [in:] *Călători străini în Țările Române* [Foreign travelers in the Romanian Countries], vol. 1, București 1968, p. 149 [CSȚR].

⁸ A.M. Graziani, *Descrierea Moldovei* (1564) [Description of Moldavia (1564)] [in:] CSȚR, vol. 2.

⁹ *Ibidem*, p. 381–382.

ly reflect the issue under study. Firstly, we find relatively accurate and reliable information about the number of towns in the Principality of Moldavia. Miron Costin in his famous “Polish Chronicle” mentions 32 towns. In addition, he mentions the towns that the Turks took: Reni, Izmail, Kiliya, Belgorod, Tigina (Bendery).¹⁰

Similar information is given by the Vatican missionary Marco Bandini.¹¹ According to the studies of Soviet historians, the proportion of the urban population of the Moldavian principality in the 17th century was 75,000 people, or 18% of all inhabitants.¹² In our opinion, these statistics are very conditional, and the data are highly overestimated and deeply controversial. The lack of reliable sources on historical demographics makes this problem almost insoluble, so we will not address this issue.

Meanwhile, the sources of the era quite richly testify that the agrarian activity of the cities was quite intensive and still occupied an important, practically leading place in the multifunctional urban economic infrastructure. Statistical material also indicates structural changes in the urban economy, namely (Diagram 1):

1. animal husbandry: 27;
2. viticulture: 20;
3. grain production: 19.

In percentage terms, the correlation index of agricultural sectors is shown in Diagram 2A and 2B, respectively: livestock — 25% in 2A and 25.8% in 2B; viticulture — 18.1% in 2A and 14.3% in 2B; grain production — 17.2% in 2A and 18% in 2B.¹³

As can be seen from the above, livestock breeding has become the leading and main commodity sector among the agricultural sectors of the cities, while viticulture and grain growing have lost their positions to a certain extent.

In other words, in this particular case, there is not only a restructuring of agricultural industries in the urban environment, but also some stabilisation of the agricultural activities of the townspeople, depending on the needs and demand in both the domestic and foreign markets. In particular, animal husbandry (raising livestock for sale) increased significantly by 10% compared to the previous period and accounted for a quarter of all agricultural occupations of the townspeople. Viticulture has almost halved, from 32% to 18.1%, while grain growing has decreased, respectively, from 22% to 17%. In percentage terms, the statistical data are generally quite homogeneous, with the exception of viticulture (which allows us to conclude that there were no sharp declines).

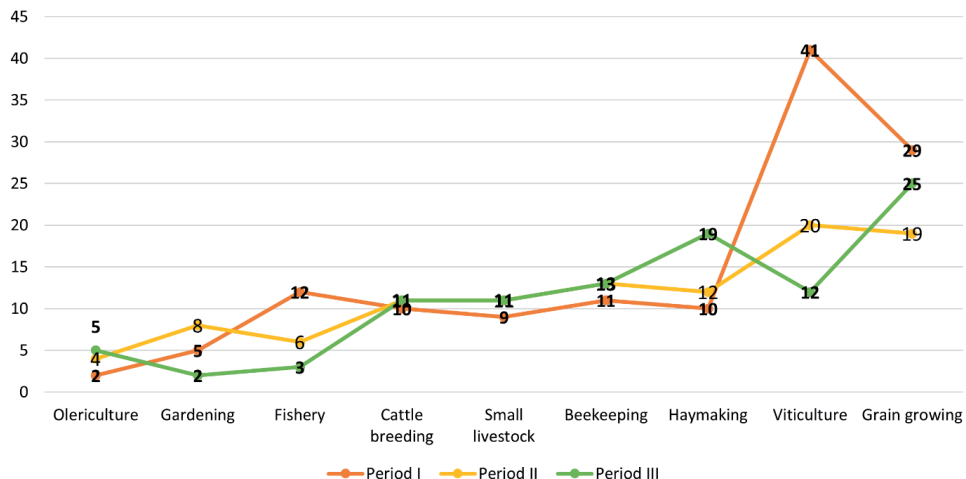
¹⁰ *Cronica poloneză* [The Polish Chronicle] [in:] M. Costin, *Opere* [Works], București 1960, p. 216–217.

¹¹ M. Bandin, *Vizitatiei Moldovei* [Visiting Moldavia] [in:] CSȚR, vol. 5, p. 293, 322–345.

¹² INH, vol. 1, p. 173.

¹³ See general scheme in Diagram 3A and 3B, respectively.

Diagram 3A. Selected agricultural and trade sectors of the urban economy, excluding fortress towns.
Number of source evidences (16th–18th centuries)

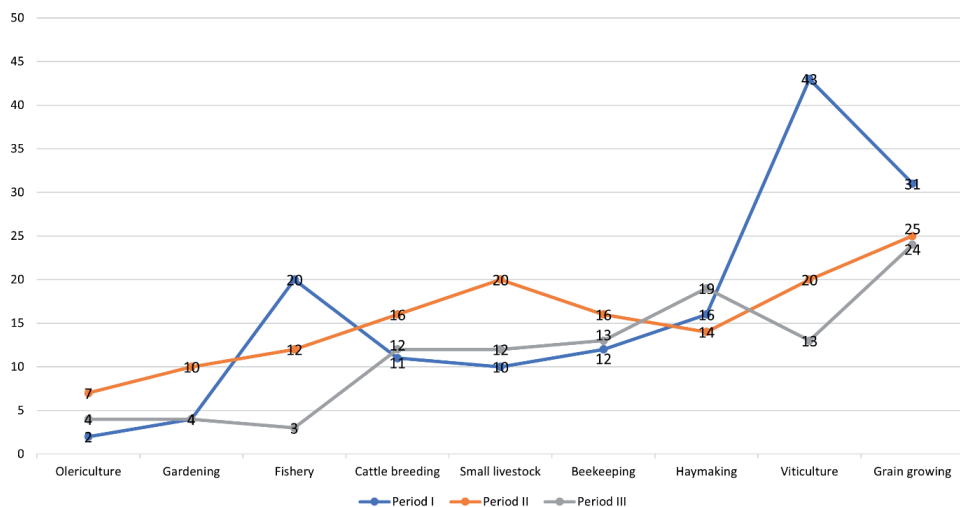


Period I: The end of the 16th century – the 1st quarter of the 17th century

Period II: The 2nd and 3rd quarters of the 17th century

Period III: The last quarter of the 17th century – early 18th century

Diagram 3B. Selected agricultural and trade sectors of the urban economy, including fortress towns.
Number of source evidences (16th–18th centuries)



Period I: The end of the 16th century – the first quarter of the 17th century

Period II: The 2nd and 3rd quarters of the 17th century

Period III: The last quarter of the 17th century – early 18th century

Each individual industry played its role at every stage in accordance with the conditions of regional production specialisation of the domestic market, the needs of sales within the country and abroad, as well as the formation of commodity–money relations. The latter played a particularly important role in the development of the cities. There were no cities without trade. Trade became the main catalyst in the process of integrating the rural district into the system of commodity–money circulation of the city, and the city, in turn, received a powerful impetus for handicraft development, dynamic and stable economic restructuring, and socio-demographic growth.

It is also important that the sphere of urban economy also included crafts and trade and the merchant occupations of the townspeople. All the important branches of the urban economy were primarily directly related to trade. The function of the market basically distinguished the city from the village. Written sources testify that in this period, in addition to agriculture, handicraft specialties were also developed in the urban environment. The most common were the following: blacksmiths, masons, carpenters, tanners, shoemakers, furriers, potters, candle makers, tailors, etc. In total, there were more than 17 craft specialisations in the urban environment, and ten in the rural one.¹⁴

A feature of Moldavian towns was that agricultural products produced in the urban environment also served as the primary raw material for the production activities of artisans. Therefore, the need for this or that agricultural product or raw material was dictated by consumer demand, in both the domestic and foreign markets. Adaptation to meet the demand for certain raw materials has been a natural and natural process in the evolutionary development of the urban market and its functional transformation over the centuries.

Assessing the third period, covering the last quarter of the 17th century and the first decade of the 18th century, it should be noted that it is the least poorly reflected in the sources. According to the statistical data in Diagrams 1 and 2B, grain production becomes predominant among the agricultural occupations of the townspeople — 25; followed by animal husbandry — 22 (Diagram 1), and viticulture — 12 (Diagram 1). In percentage terms, agricultural sectors were represented as follows: grain production — 25.5% in 2A and 23.6% in 2B; livestock — 22% in 2A and 23.6% in 2B, and viticulture — 12% in 2A and 12.8% in 2B.

The summarised statistical data for all three periods, based on Diagrams 1 and 2B, respectively, made it possible to make a graphical representation in Diagrams 3A and 3B, respectively, which shows the ratio of the agricultural sectors of the urban economy throughout the period as a whole and the internal transformational changes that took place over almost two centuries.

The diagrams show that the lowest rate of economic development is observed in the third period (the last quarter of the 17th century and the first decade of the 18th cen-

¹⁴ INH, vol. 1, p. 194.

ture), which once again convincingly proves the reliability of the concept of a crisis and a deep recession in the economy of the Principality of Moldavia.

The low level of economic development was due to a number of reasons and circumstances, both internal and external: political instability, military conflicts, frequent changes of rulers (more than 30 during this period), the establishment of the Greek Phanariot regime (rulers began to be appointed by the Ottoman Porte), and so on. All these factors led to the undermining of the country's economy, the weakening of urban trade and craft potential, the decline of all production sectors, primarily agricultural, which occupied leading positions in the economy of the Principality of Moldavia.

A significant increase in centralised rent led to the sharp impoverishment of the entire population (including townspeople), who could not cope with the heavy tax burden, which ultimately led to a deep economic crisis. In addition to these factors, the following reasons and circumstances also contributed to the aggravation of the economic decline: economic recession in countries that consumed agricultural goods from the Principality of Moldavia; weakening of the competitiveness of trade and commercial relations in foreign markets (in terms of quality, price, marketability); frequent military conflicts; epidemics; natural disasters and lean years.

Numerous unfavourable circumstances, of course, directly affected the position of the towns and led them into destructive decline. During this period, deeply pronounced regressive and degradation processes are clearly observed in both the agrarian and the trade and craft activities of the townspeople, as a result of which the development of some cities was either slowed down or they changed from large trading centres into ordinary rural settlements. For example, such a fate befell Lăpușna, Țuțora, Ștefănești, and other towns, which never regained their former urban status. Similar processes were observed in other countries of the world. French urban researchers P. Lavedan and J. Huguency rightly point out that "it would be wrong to consider urbanisation as a process of continuous growth [...] in fact, we notice that urbanisation has periods of deurbanisation."¹⁵

The next task in our study is to determine the place of each branch of agricultural production. Having collected all the data for the three periods, we received the following information about the main occupations of the townspeople (Diagram 1):

1. wine growing — 21.4 %;
2. grain production — 19.6 %;
3. animal husbandry — 19.6 %.

As can be seen from the generalised data, in percentage terms, the indicators for each of the leading agricultural sectors show that each one, taken separately, practically occupied the same place in the urban economy. In this context, we are interest-

¹⁵ P. Lavedan, J. Huguency, *L'Urbanisme au Moyen Age*, Paris 1974, p. 5–6.

ed, first of all, in the problem of the correlation between the branches of agriculture and animal husbandry in the system of the agricultural production cycle of the urban economy. Also, we will consider not just economic criteria for the results, but the level of sales of products of a certain branch, especially the correlation of the marketability of agriculture and livestock in the balance of urban economy.

Describing the agrarian activity of the townspeople, we tried to identify the percentage of the leading agricultural sectors in the urban environment. Statistical material shows that the leading position was occupied by grain production — 21.5% in Diagram 2A and 20.3% in 2B; viticulture — 21.5% in 2A and 19.3% in 2B; fruit growing — 4.4% in 2A and 4.5% in 2B; horticulture — 3.2% in 2A and 3.3% in 2B.

Animal husbandry, in turn, included the raising of small livestock — 10.6% in 2A and 10.7% in 2B; cattle — 9.4% in 2A and 10% in 2B, as well as haymaking — 12% in 2A and 12.4% in 2B.

An important addition to livestock breeding and farming in the urban environment was beekeeping and fishing, so we singled them out as separate occupations. Numerous pieces of evidence of the abundance of honey and fish in the Principality of Moldavia has been preserved, according to which 11% in 2A and 10.4% in 2B of the townspeople were engaged in beekeeping, and 6% in 2A and 8.9% in 2B were engaged in fishing.

Based on the obtained statistical data, we compiled Table 1.

Table 1. Correlation between the agriculture, animal husbandry, beekeeping and fishing occupations of Moldavian townspeople (at the end of the 16th century – beginning of the 18th century)

Main agricultural branches	Information on towns	Information on towns and fortresses
Land cultivation	49.7%	49.7%
Animal husbandry	31.6%	31.1%
Beekeeping	11%	10.4%
Fishing	6%	8.9%

The data in this table show that the activity of the townspeople related to the cultivation of the land was about 50%, and related to livestock — about 35%.

The leading and main occupations of the townspeople in the agrarian sector were viticulture and winemaking, grain growing (here we also include flour milling), haymaking, fruit growing and horticulture. The above branches of agricultural activity were especially popular, because, firstly, they provided the consumer food base of a town. Secondly, grain, wine, fruits and vegetables have always been the most sought-after goods in the town market. Thirdly, this agricultural industry covered the needs for food and essential goods for the daily life of all town dwellers without exception.

Most of the inhabitants of the cities and towns (boyars, merchants, artisans and others) had their own vineyards, orchards, kitchen gardens, and household plots, which they cultivated for their own needs. Only those townspeople who owned large and fertile plots of land and allotments produced grain and other products of agricultural activity for sale. In addition, a town was the centre of flour-grinding production and the main base for the concentration of grain reserves, both for town dwellers and peasants from the surrounding villages.

Cultivation and agriculture in the era under study was closely and directly related to another important economic sector, animal husbandry. It was noted above that in the Principality of Moldavia the dominant system was a combination of animal husbandry and agriculture. This concept is substantiated on the basis of the agrarian history of the villages, where animal husbandry and agriculture have always been the deeply traditional and main occupations of rural residents.

In that period, livestock products became the main commodity unit of the Principality of Moldavia. It was the breeding of livestock for sale that determined such a high rate for this industry — about 35% in the specific volume of agricultural activities of the townspeople. Livestock products provided not only stable food for the townspeople and raw materials for artisans, but became a highly demanded commodity unit in foreign markets.

The documents at our disposal contain a wide variety of information about livestock trading at specialised fairs and markets, donations of livestock to monasteries by boyars and rulers, paying and collecting debts in livestock between townspeople, the obligatory delivery of animals to the Ottoman Porte, giving heads of livestock as a dowry, and so on.

A town, being the centre of a rural district, with a dominant agricultural nature of production, concentrated animals and livestock products for sale in both the domestic and foreign markets. Animals were sold mainly by large and average-sized landowners and boyars, who lived not only in their estates, but also in the town. It is possible that some of the animals were bought by intermediary merchants directly from peasants, who also bred livestock for sale.

Animals destined for sale in the town were driven in herds to special pastures located nearby, which were part of the specialised livestock markets that operated constantly. In addition, Moldavian cattle of meat, dairy and draft breeds were in great demand among foreign European merchants. The external market became an important factor contributing to the development of cattle breeding in the Moldavian principality. Large livestock fairs were held up to seven times a year, especially in border towns, since it was easier to drive the purchased cattle to neighbouring countries from there.

However, in our opinion, it is wrong to believe that the breeding of animals in towns was only for the purpose of sale. It is widely known, and this is a centuries-old tradition among almost all peoples who were engaged in animal husbandry and agriculture, that some animals were raised as draft power and used for ploughing.

The use of domestic animals in arable farming contributed to the development and productivity of various agricultural activities, especially the production of cereals for sale.

Cattle breeding was an occupation that required certain conditions: the possession of fertile and extensive pastures and meadows, enabling the grazing of a large number of livestock and harvesting of hay in sufficient quantities for the winter. It was also important to have hired shepherds and special fences for sheltering and keeping livestock. Therefore, mainly boyars and wealthy townspeople would have large herds of cattle for sale.

It is known that in the period under study, one or two cows were enough to support an average urban family (depending on the number of family members). In particular, Dimitrie Cantemir in "Description of Moldavia" notes: "if there were one or two cows on the farm, it was considered sufficient to feed adults and children, since cows gave from 40 to 24 litres of milk per day".¹⁶ As a rule, ordinary townspeople had suburban areas for grazing a small number of livestock. Those townspeople and merchants who were engaged in raising livestock for sale had their own pastures, or rented them.

In addition, the town borders also included part of the ruler's domain, where cattle were raised exclusively for sale to provide income for the treasury. The townspeople had a number of special duties; in particular, they were obliged to fulfil the hay quota in favour of the ruler.

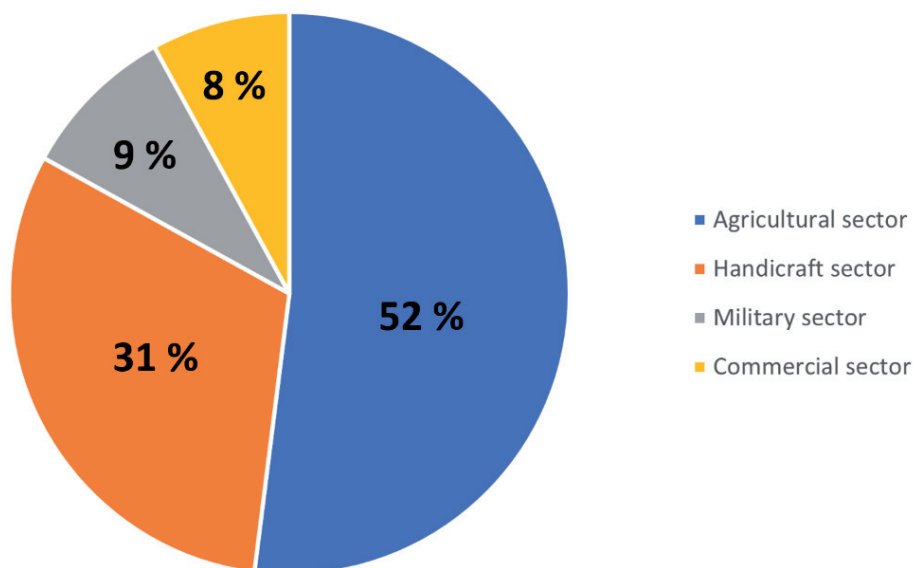
Summarising the above, we would like to note that, firstly, animal husbandry, as an agricultural sector, occupied a fairly stable position in the urban economy and provided a third of the urban agricultural output. Secondly, livestock products were among the leading commodity units in the domestic and foreign markets. Thirdly, animal husbandry provided rich and varied raw materials for handicrafts, especially for leather production, which occupied a particularly important place in urban crafts.

Based on the material presented above, it can be concluded that the economy of the towns and cities of the Principality of Moldavia in the period studied was represented by all the main agricultural sectors. Also, the studies confirm the well-established opinion that agricultural and trade and handicraft activities were the basis of the urban economic infrastructure and were closely interconnected. Undoubtedly, some of the agricultural and handicraft products of the townspeople, including subsidiary farming and crafts, were intended for both their own consumption and for sale. It is quite possible that this is why there was no clear social gradation and differentiation of the townspeople engaged in trade, handicrafts or agricultural activities. As a rule, they combined these types of activity. For example, the economy of the city of Suceava in the second half of the 18th century was characterised by the following ratio: 63% in the agricultural sector and only 37% in the handicrafts sector. This situation, to the

¹⁶ D. Cantemir, *Descrierea Moldovei* [Description of Moldavia], Chişinău 1994, p. 153.

greatest extent, characterises and reflects the specifics of Moldavian towns, which had a pronounced semi-agrarian character (Diagram 4).¹⁷

Diagram 4. The economy of the city of Suceava in the second half of the 18th century (percentage of citizens' occupations in various sectors of activity)



The diversified economic system left a special imprint on the socio-professional urban structure. It is also obvious that not all townspeople were involved in agricultural activities, and the share of agricultural activities was not equally proportional in different towns. The dominance of the agrarian factor in the urban environment and the semi-agrarian nature of the towns of the Principality of Moldavia caused significant functional changes in the evolution of the economic infrastructure of the cities, in the formation of the urban market, trade relations, craft formations, and so on in the ensuing centuries. This topic is a subject for a separate study.

¹⁷ L. Zabolotnaia, *On the issue of studying the social structure of the city of Suceava in the second half of the 18th century* [in:] *Iz istorii social'nyh otnoshenij i obshchestvennogo dvizhenija v Moldove XIV–XX veka* [From the history of social relations and social movement in Moldova in the 14th–20th centuries], Chisinau 1991, p. 33–34, 38–39, 42–43.

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